

May 21, 2004

To: Commissioner for Patents P.O.Box 1450 Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572 28 Davis Avenue Poughkeepsie, N.Y. 12603

Subject:

Serial No. 10/796,427 03/09/04

Mou-Shiung Lin et al.

POST-PASSIVATION METAL SCHEME ON AN IC CHIP WITH COPPER

## INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation
In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56.

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on May 24, 2004.

Stephen B. Ackerman, Reg.# 37761

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- U.S. Patent Application MS-002CCC\_CIP, filed 05/24/02, Serial No. 10/154,662, assigned to the same assignee, "Top Layers of Metal for High Performance IC's," discusses the manufacturing of high performance Integrated Circuit (IC's).
- U.S. Patent Application MEG-02-016, filed 05/27/03, Serial No. 10/445,558, assigned to the same assignee, "High Performance System-on-Chip Inductor Using Post Passivation," discusses the manufacturing of high performace IC's.
- U.S. Patent Application Publication US 2004/0029404 A1 to Lin, "High Performance System-on-Chip Passive Device Using Post Passivation Process," discloses a system and method for forming post passivation passive components, such as resistors and capacitors.
- U.S. Patent Application Publication US 2004/0016948 A1 to Lin, "High Performance System-on-Chip Discrete Components Using Post Passivation Process," discloses a system and method for forming post passivation discrete components.
- U.S. Patent 6,544,880 to Akram, "Method of Improving Copper Interconnects of Semiconductor Devices for Bonding," discloses gold over a copper pad and optionally additional metals to prevent formation of intermetallic compounds in wire bonding.

## MEG-03-005

The following two U.S. Patents teach using an Al cap over a copper bond pad for wire bonding:

- 1) U.S. Patent 6,451,681 to Greer, "Method of Forming Copper Interconnection Utilizing Aluminum Capping Film".
- 2) U.S. Patent 6,376,353 to Zhou et al., "Aluminum and Copper Bimetallic Bond Pad Scheme for Copper Damascene Interconnects."

The following two U.S. Patents discloses a postpassivation interconnection process:

- 1) U.S. Patent 6,495,442 to Lin et al., "Post Passivation Interconnection Schemes on Top of the IC Chips."
- 2) U.S. Patent 6,383,916 to Lin, "Top Layers of MEtal for High Performance IC's."

Sincerely,

Stephen B. Ackerman,

Reg. No. 37761

Doctor Humber (Optional) PFIEP 10-1449 101796,427 RMATION DISCLOSURE CITATION IN AN APPLICATION MAY 2 6 2004 Filma De (Use several sheets if necessary) U. S. PATENT DOCUMENTS EXAMINER HULE DOCUMENT HUMBER CLASS **BUSCULE** MIM Akram 438 438 601 438 438 618 438 637 FOREIGN PATENT DOCUMENTS Translation DOCUMENT NUMBER DATE COUNTRY CUSS SUBCLASS YES OTHER DOCUMENTS (Including Author, Title, Dale, Portinera Pages, Etc.) Ser # 10/154,662, assigned

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